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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/058,150   | 10/29/2001  | Brian Keith Odom     | 5150-61502          | 4099             |
| 35690  | 7590        | 03/16/2005           | EXAMINER            |                  |
| MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.<br>P.O. BOX 398<br>AUSTIN, TX 78767-0398 |             |                      | SHAH, KAMINI S      |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2142                |                  |

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                             |  |
|------------------------------|-------------------------------|-----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/058,150 | Applicant(s)<br>ODOM ET AL. |  |
|                              | Examiner<br>Kamini S. Shah    | Art Unit<br>2142            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-105 is/are pending in the application.
- 4a) Of the above claim(s) 51-77 and 81-105 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-15, 17-20, 26-35, 38-40 and 42-45 is/are rejected.
- 7) ☐ Claim(s) 11, 12, 16, 21-25, 36, 37, 41 and 46-50 is/are objected to.
- 8) ☒ Claim(s) 1-105 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/14/02; 10/08/03; 1.</u> | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

- Claims 1-50, 78-80 are drawn to reconfiguration measurement system (RIO) for executing a hardware configuration program on programmable hardware element (FPGA) as disclosed in specification pages 6-18.
- Claims 51-77 and 81-105 are drawn to a method for configuring a device such as configuring the RIO unit for executing a configuration program to generate and receive user input specifying the system configuration, as disclosed in specification pages 19-25.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim deems to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include

all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Mark William on 03/03/05 a provisional election was made with traverse to prosecute the invention of group I, claims 1-50, 78-80. Affirmation of this election must be made by applicant in replying to this Office action. Claims 51-77 and 81-105 are withdrawn from the further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Objections***

4. Claims 78-80 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1-3. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 3-4, 7-10, 14, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of these dependent claims includes the either following limitation "a first portion of the measurement function" and "a second portion of a measurement function" or "at least portion of the measurement program", which is indefinite.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1-2, 5, 6, 13, 15, 17, 18, and 19, 26-27, 30, 31, 38, 40, 42, 43, and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Casselman 5,684,980.

Regarding to claimed invention (claims 1 and 2), Casselman teaches a reconfiguring the FPGA which is a claimed "a programmable hardware element" comprising:

A computer system comprising a computer and memory, (*reconfigurable control section 206*); wherein memory stores measurement programs, (*reconfigurable control section 206 used to run the LDG and FPID, col. 5, lines 24-29*); computer system coupled to FPGA and one or more fixed hardware resources coupled to the programmable hardware element, (*FPGAs 401-405 are connected to a local bus, and FPGAs 406-410 connected to the array 200, col. 5, lines 59-col. 6, lines 1-15*); wherein the hardware configuration program specifies a configuration for the programmable hardware element that implements the measurement function and performs the measurement function, (*boot-up FPGA 504 has ten configuration bit output pints 508 connected to the configuration bit input pins of the ten FPAGs 401-410 of the*

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*reconfigurable control section 206. The EEPROM 506 contains instructions, which control and configure the boot-up FPGA 504; see col. 7, lines 31-49).*

Regarding claims 5 and 6, wherein fixed hardware resources and programmable hardware element are operable to provide an I/O interfacing to an external system (FPAG and *FPINs operable to provide I/O to external system in the array 200, see fig. 2 and col. 8, lines 55-68).*

Regarding to claims 15,18 and 19, wherein the measurement program comprises a graphical program (*programmable hardware such as FPGAs or CPLDs, in response to graphical program provides the user the ability to develop or desired functionality, see col. 4, lines 18-25).*

Regarding claim 17, wherein the measurement function comprises measurement analysis (*reconfigurable control section 216 comprises measurement analysis).*

Regarding claims 26-27, 30, 31, 38, 40, 42, 43, and 44, claims merely recites the reconfigurable control system of the claimed reconfigurable measurement system of claims 1-2, 5, 6, 13, 15, 17, 18, and 19, therefore rejected for the similar reasoning.

***Allowable Subject Matter***

9. Claims 3-4, 7-10, 14, 20, 28,29,32,35, 39, and 45 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Claims 11,12,16,21-25,36,37 and 41, 46-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamini S. Shah whose telephone number is 571-272-2279. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack B. Harvey can be reached on 571-272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kamini S Shah



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Primary Examiner  
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